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	7	1	U.S. PATENT	DOCUMENTS	1			
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ļ	AA	4,816,450	03/28/89	Bell et al.	514	25		
	AB	5,190,876	03/02/93	Merrill, Jr. et al.	435	240		
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7		OTHER DOCUM	ENTS (including Au	thor, Title, Date, Pertin	ent Pages	, etc.)		
$\perp 3$	CA	H. Sun et al., "W Petrosia Weinber	Veinbersterol Disulfu gi", Tetrahedron, Vo	tes A and B, Antiviral S N. 47, No. 7, pp. 1185	teriod Sul 1190 (199	fates from	the Spo	nge
7	СВ	S. Sakemi et al., "Antitumor Cyclic Peroxides from the Sponge Plakortis Lita", Tetrahedron, Vol. 43, No. 1, pp. 263-268 (1987).						
13	<b>≥</b> cc			ure Elucidation of Onna nella sp. J. Am. Chen				4853
R	CD	Gymnothorax jav		ofigurations of Ciguatox Precursor from the Dir 30-4386 (1990).				oxicus",
	CE	M. Kernan et al., Hexabranchus san pp. 5014-5020 (1	nguineus andd Spong	ungal Metabolites from es of the Genus Halioh	the Spanis ondria", J	sh Dancer I . Org. Che	Nudibra m., Vol	nch !. 53,
	CF		Antneoplastic Agents 113, No. 17, pp. 66	. 224 Isolation and Stri 93-6695 ( 1991).	ucture of I	Neristatin 1	<sup>la*</sup> , J. A	l <i>m</i> .
	CG	D. Schaufelberge Ketone from Bugi	r et al., "Revised Str ula neritina", J. Org	ucture of Byrostatin 3 a . Chem., Vol. 56, pp. 2	nd Isolatio 895-2900	on of the B (1991).	ryostati	n 3 26-
	СН	W. Murayama et Journal of Chrom	al., "A New Centrifi atography, Vol. 239	ugal Counter-Current C , pp. 643-649 (1982).	hromatog	aph and It	s Appli	cation",
	CI	D. Martin et al.,	"Countercurrent Chr	omatography for Drug Chapter Nine, pp. 565	Discovery	and Devel	lopmen	
	CI	S. Kohmoto et al.	, "Isospongiadiol, a	Cytotoxic and Antiviral Chemistry Letter, pp. 10	Diterpen	from a (1987).		

F		Page 2 of 5
	СК	G. Pettit et al., "Isolation and Structure of Bryostatins 14 and 15 <sup>1</sup> ", Tetrahedron, Vol. 47, No. 22, pp. 3601-3610 (1991).
	gr	R. Bruening et al., "Isolation of Tunichrome B-1, A Reducing Blood Pigment of the Sea Squirt, Ascidia Nigra'", Journal of Natural Products, Vol. 49, No. 2, pp. 193-204 (1986).
	СМ	M. Reetz et al., "Sterioselective Synthesis of β-Amino Alcohols from Optically Active a-Amino Acids", Angew. Chem. Int. Ed. Eng., Vol., 26, No. 11, pp. 1141-1143 (1987).
	CN	Phostenik et al., "Application of the Asymmetric Synthesis in the Determination of the Configuration of Amino Alcohols and Diamines with Two Adjacent Asymmetric Carbon Atoms", Croakca Chemica Acta, Vol. 29, pp. 393-402 (1957).
	со	B. Ravi et al., "Recent Research in Marine Natural Products: The Puupehenones", Pure & Appl. Chem., Vol. 51, pp. 1893-1900.
	СР	A. Stierle et al., "A Marine Micrococcus Produces Metabolites Ascribed to the Sponge Tedania ignis", Experientia, Vol. 44, pp. 1021 (1988).
	cQ	F. Schmitz et al., "Metabolites from the Marine Sponge <i>Tedania ignis</i> . A New Atisanediol and Several Known Diketopiperazines <sup>1</sup> ", <i>J. Org. Chem.</i> , Vol. 48, pp. 3941-3945 (1983).
12	CR	R. Dillman et al., "An Unusual Sulfur-Containing Diketopiperazine from the Bermudian Sponge Tedania Ignis'", Journal of Natural Products, Vol. 54, No. 4, pp. 1159-1161 (1991).
13	CS	A. Stierle et al., "Maculosia, a host-speciific phytotoxin for spotted knapweed from Alternaria alternata", Proc. Natl. Acad. Sci USA, Vol. 85, pp. 8008-8011 (1988).
3	ČT	A. Stierle et al., "Benzothiazoles From a Putative Bacterial Symbiont of the Marine Sponge Tedania ignis", Tetrahedron Letters, Vol. 32, No. 37, pp. 4847-4848 (1991).
3	CU	M. Raub et al., "Clavepictines A and B: Cytotoxic Quinolizines From the Tunicate Clavelina picta", J. Am. Chem. Soc., Vol. 113, pp. 3178-3180 (1991).
1/5	cv	S. Sakemi et al., "Xestamines A, B and C Three New Long-Chain Methoxylamine Pyridines from the Sponge Xestopongia Weidenmayer,", <i>Journal of Natural Products</i> , Vol. 53, No. 4, pp. 995-999 (1990).
de	CW	D. Steirle et al., "Antimicrobial N-Methylpyridinium Salts Related to the Xestamines From the Caribbean Sponge Calyx Podatypa", Journal of Natural Products, Vol. 54, No. 4, pp. 1134-1136 (1991).
	сх	S. Kohmoto et al., "1,1-Dimethyl-5-6-dihydroxyindolinium chloride from a deep water marine spong, <i>Dercitus sp.</i> ", <i>Experientia</i> , Vol. 44, pp. 85-86.
	CY	H. Sun, et al., "A Brominated (Aminoimidazolinyl)indole from the Sponge Discodermia polydiscus", J. Org. Chem., Vol. 56, pp. 4307-4308 (1991).
	CZ	R. Sakai et al., "Manzamine B and C, Two Novel Alkaloids from the Sponge Halicloma sp.", Tetrahedron Letters, Vol. 28, No. 45, pp. 5493-5496 (1987).
	CCA	S. Bobzin et al., "Aromatic Alkaloids from the Marine Sponge Chelonaplysilla sp., J. Org. Chem., Vol. 56, pp. 4403-4407 (1991).
	ССВ	S. Sakemi et al., "Nortopsentins A, B, and C. Cytotoxic and Antifungal Imidazolediylbis[indoles] from the Sponge Spongosorites ruetzleri", J. Org. Chem., Vol. 56, pp. 4304 4307 (1991).
	ccc	P. Keifer et al., "Bioactive Bromopyrrole Metabolites from the Caribbean Sponge Angelas conifera", J. Org. Chem., Vol. 56, pp. 2965-2975 (1991).

	CCD	F. Schmitz et al., "Biologically active compounds from marine organisms", Fure & Appl. Chem., Vol. 62, No. 7, pp. 1393-1396 (1990).
	CCE	D. Schaufelberger et al., "Separation of Pyrroloimidazoles from Indo-Pacific Marine Sponges by Nigh-Speed Countercurrent Distribution", <i>Journal of Liquid Chromatography</i> , pp. 1909-1917 (1989).
	CCF	G. Pethi et al., "Antineoplastic agents. 168. Isolation and structure of axinonydantoin <sup>1</sup> ", Can. J. Chem., Vol. 68, pp. 1621-1624 (1990).
	CCG	F. Schmitz et al., "Cytotoxic Aromatic Alkaloids from the Ascidian Amphicarpa meridiana and Leptoclinides sp.: Meridine and 11-Hydroxyascididemin", J. Org. Chem., Vol. 56, pp. 804-808 (1991).
	ССН	G. Gunawardana et al. "Dercitin, a New Biologically Active Acridine Alkaloid from a Deep Water Marine Sponge, Dercitus sp.", J. Am. Chem. Soc., Vol. 110, pp. 4856-4848 (1988).
	CCI	G. Gunawardana et al., "Pyridoacridine Alkaloids from Deep-Water Marine Sponges of the Family Pachastrellidae: Structure Revision of Dercitin and Related Compounds and Correlation with the Kuanoniamines", J. Org. Chem., Vol. 57, pp. 1523-1526 (1992).
R	CCI	G. Gunawardana et al., "New Cytotexic Acridine Alkaloids from Two Deep Water Marine Sponges of the Family <u>Pachastrellidae</u> , <u>Tetrahedron Letters</u> , Vol. 30, No. 33, pp. 433359-4362 (1989).
1	ССК	S. Sakemi et al., "Batzellines A, B, C, Novel Pyrroloquinoline Alkaloids From the Sponge Batzella Sp.", Tetrahedron Letters, Vol. 30, No. 19, pp. 2517-2520 (1989).
B	CCL	H. Sun et al., "Isobatzellines A, B, C, and D. Cytotoxic and Antifungal Pyrroloquinoline Alkaloids from the Marine Sponge Batzella sp.", Norg. Chem., Vol. 55, pp. 4964-4966 (1990).
de	CCM	G. Kalaus et al., "Synthesis of Vinca Alkaloids and Related Compounds. 37 <sup>1</sup> . Some New Reactions of (±)-C-Norquebrachamine and Its Derivatives", J. ORg. Chem., Vol. 53, pp. 42-45 (1988).
B	CCN	E. Jares-Erijman et al., "Crambescidins: New Antiviral and Cytotoxic Compounds from the Sponge Crambe crambe'", J. Org. Chem., Vol. 56, pp. 5712-5715 (1991).
	ссо	Y. Kashman, et al., "Ptilomycalin A: A Novel Polycyclic Guanidine Alkaloid of Marine Origin", J. Am. Chem. Soc., Vol. 111, pp. 8925-8926 (1989).
	ССР	R. Berlinck eval., "Two new guanidine alkaloids from the Mediterranean sponge Crambe crambe", Tetrahedron Letter, Vol. 31, No. 45, pp. 6531-6534 (1990).
	CCQ	K. Rinehart et al., "Ecteinascidins 729, 743, 745, 759A, 759B, and 770: Potent Antitumor Agents from the Caribbean Tunicate Ecteinascidia turbinata", J. Org. Chem., Vol. 55, pp. 4512-4515 (1990).
	CCR	A. Wright, et al., "Antitumor Tetrahydroisoquinolline Alkaloids from the Colonial Ascidian Ectelnascidia turbinata", J. Org. Chem., Vol. 55, pp. 4508-4512 (1990).
	ccs	R/Brusca and G. Brusca, <i>Invertebrates</i> , Sinauer Associates, Sunderland, MA, (1990), pp. 706-709.
W	сст	B. Palameta et al., "Chromatography of the Lipide Bases on Paper Impregnated with Silicic Acid", Croatica Chemica Acta, Vol. 33, pp. 133-135 (1961).
[ ]	199	Y. Kawano et al., "Isolation and Structure of Six New Cerebrosides". Biologically Active Glycosides from Asteroidea, XIII, pp. 19-24. Liebigs Annalen Der Chemie, 1988

	CCV	N. Gulavita et al., "Two Epimeric Aliphatic Amino Alcohols fr J. Org. Chem., Vol. 54, No.2, pp. 367-369 (1989).	om a Sponge, Xestopongia sp. 1,	
	ccw	C. Jimenez et al., "Novel Marine Sponge Amino Acids, 10.1 Xestoaminots from Xestospongia Sp.", Journal of Natural Products, Vol. 53, No. 4, pp. 978-982 (1990).		
	ссх	K. Mori et al., "Synthesis and Absolute Configuration of the Ty Alcoholss [(5E, 7E)-2-Amino-5,7-tetradecadien-3-ols] Isolated sp. Synthesis if Sphingosine Relative, XIII, pp. 131-137.	fom a Sponge, Xestrospongia	
/	CCY	J. Osby et al., "An Exceptionally Mild Deprotection of Phthalin 25, No. 20, pp. 2093-2096 (1984).		
	CCZ	W. Stoffel, "Sphingolids" (1971), pp. 57-82. Annual Review of Biochemistry,		
	CCCA	A. Merrill et al., Structural Requirement for Long-Chain (Sph Protein Kinase C in Kitro and for the Cellular Effects of These 28, pp. 3138-3145 (1989).	ingoid) Based Inhibition of	
K	СССВ	Y. Hannun et al., "Functions of Sphingolipids and Sphingolipid Breakdown Products in Cellular Regulation", Science, Vol. 243, pp. 200-507. 1989		
3	cccc	A. Merrill, "Cell Regulation by Sphingosine and More Complex Sphingolipids <sup>1</sup> ", Journal of Bioenergetics and Biomembranes, Vol. 23, No. 1, pp. 83-104 (1991).		
7	CCCD	J. Witten et al., "Structure of Two Cockreach Neuropeptides A Bombardment Mass Spectrometry", Biochemical and Biophysic 124, No. 2, pp. 350-358 (1984).	assigned by Fast Atom cal Research Communication, Vol.	
3	CCCE	E. Hermann et al., The Detection, Assay and Evaluation of A Virol., Vol. 3, pp 158-192 (1961).	ntiviral Drugs", Progr. med.	
Z	CCCF	S. Grode et al, "Ceramides from the Sponge Dysidea etheria", Lipids, Vol. 18, No. 12, pp. 889-893 (1983).		
-0	CCCG	Chem. Abs., 1991, 114, 214413b.		
	СССН	D.J. Frulkner, "Marine Natural Products", Nat. Prod. Rep., Vol. 8, pp. 97-147 (1991)		
	CCCI	M.H.G. Munro, et al., "The Search for Antiviral and Anticancer Compounds from Marine Organisms", Bioorganic Marine Chemistry, Vol. 1, pp. 93-176 (1987)		
	CCCI	Barry C. Smith et al., "Phytoplankton Pigments Accumulated by the Artic Surfclam", Journal of Shellfish Research, Vol. 11, No. 2, pp. 479-483 (1992).		
EXAMIN	IER		DATE CONSIDERED	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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## FORM PTO-1449 INFORMATION DISCLOSURE CITATION Attorney Docket: 4126-4012 Applicant: Rinehart et al. Filing Date: October 23, 2003 Group Art Unit: tba

1	OTHER DQCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)
	Nancy Louise Fregeau, Ph.D. Thesis entitled "Biologically Active Compounds from a Claim and a Tunicate" submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in chemistry in the Graduate College of the University of Illinois at Urbana-Champaign, 1992. First released to the public by the University – April 14, 1998.
N. a	R.S. Shallenberger et al., Laminaranase Activity in the Crystalline Style of the Surf Clam", Experientia, Vol. 30, pp. 597-598, 1974.
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